

**In the Claims:**

1. Method of operation of a control system controlling a radio network for cellular/mobile communications onboard a vessel enabling said vessel to move freely without interfering with other radio transmissions in the same area, characterised by that the control system uses data from a database containing information regarding frequency availability in regulated and unregulated areas, combined with data from a positioning system in order to determine which radio frequencies are available to said radio network at the vessel's current position, and where the control system further uses information from a radio sensor, regarding the radio environment in order to determine whether frequencies listed as available in the database are unavailable due to the other radio transmission in the area.

2. Method according to claim 1, characterised by that the control system upon detection of a change in radio environment by the radio sensor, makes decisions regarding:

whether any frequency not in use by the radio network has become freely available;

whether any frequency not in use by the radio network has become available to the radio network for transmissions that does not propagate outside the vessel;

whether any frequency in use by the radio network has become unavailable to the radio network for transmissions that does not propagate outside the vessel; and

whether any frequency currently in use by the radio network has become totally unavailable to the radio network.